

IN THE CLAIMS:

1. (Currently amended) A method for preparing pre-reacted synthetic batches, with a low content of carbon dioxide, for the production of synthetic silicates, comprising the steps of:

mixing raw materials, minerals, partially treated minerals or intermediate products therefrom, containing molecular systems of silica-sodium, silica-sodium-calcium, silica-sodium-magnesium, silica-calcium-magnesium, silica-sodium-calcium-magnesium and mixtures thereof, in selected stoichiometric amounts, which were selected from one or invariant points or from points on a line connecting invariant points of a phase diagram;

adding between 5 to 25% by weight of cullet to the batch of raw materials, which contains the molecular systems of silica-sodium, silica-sodium-calcium, silica-sodium-magnesium, silica-calcium-magnesium, silica-sodium-calcium-magnesium and mixtures thereof, in selected stoichiometric amounts in order to increase the velocity of the calcinations process, the decarbonization grade of the batch and the formation of the desired crystalline structures $\text{Na}_4\text{CaSiO}_3\text{O}_9$ and $\text{Na}_2\text{Ca}_2\text{Si}_2\text{O}_7$; and,

calcining the batch to a reaction temperature which does not form a liquid phase, wherein the CO_2 is liberated to produce said pre-reacted synthetic batch in order to completely saturate the sodium, sodium and calcium, or the sodium, calcium and magnesium of a molecular formula of glass, wherein the adding of cullet in the mixture is subjected to an agglomeration step, which permits heat penetration within the mixture of raw materials, that is absorbed toward the center of the mixture ~~giving as a result~~ resulting in a more complete reaction of the components of the mixture and for more rapidly extracting the CO_2 from the raw materials, wherein the content of carbon dioxide in the pre-reacted synthetic batches is between 1 and 0.5%, by weight.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Previously presented) The method as claimed in claim 1, wherein briquettes are formed with the mixture of raw materials and cullet before being submitted to the calcination process.
6. (Cancelled)